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Vol. I

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No. 1

WE MAKE OUR BOW

A number of years ago when the famous "Ranger Bill" enlivened the pages of the Service Bulletin with his piquant ruminations, he once solemnly observed that "the District Marking Board was out the other day and disapproved the sample marking they done last spring."

Probably the redoubtable Bill was merely poking a little fun at what he considered the mental instability of his superiors, but I have always liked to think that he was also witnessing the manifestation of a faculty that has made the Forest Service great--the ability to be dissatisfied today with the things we did yesterday. Or maybe I am getting a little bumptious there. Anyway, what I am driving at is that I hope we will all be able to heartily disapprove of this, the first number of PLAINS FORESTER long before next spring. Not that I have any present apologies to make for it--far from it. In fact, just between us girls, I think it's pretty good. But if I believed that I would still think so six months from now, my judgment would be to chuck the idea overboard and devote our talents to something that we could improve at. There is nothing so uninspiring or so representative of wasted effort as a house organ that has gotten into a rut.

By and large, I think that a house organ pretty well reflects the quality of the organization which it serves. People who are deeply interested in their work are always making interesting discoveries, finding new ways of doing things, digging up new facts. And they like to talk about it. To them it is the most interesting subject in the world, and so they are full of the kind of stuff that makes an organizational publication sparkle.

On that basis, this organization should produce a veritable whing-dinger among publications. And I think that it will. It will, that is, unless we all become tongue-tied, and while we are on that subject let me

voice the reminder that there is no source of material for PLAINS FORESTER except the members of the organization. So let me urge everyone, from the newest Stenog out in the field to the Chief, to drag up a typewriter and join in. Its pages are open to everything from Limericks to Learned Discussion, and no holds barred.

- E.L.P.

#### WE TAKE ON A GRAZING JOB

Recognizing the many years of experience of the Forest Service in successful range management on the National Forests, the Agricultural Adjustment Administration has turned to us for technical assistance in the operation of their range-betterment program. This organization has been allotted the work in Kansas and North Dakota, those being the only two Plains States in which the Program is operative this calendar year.

Our part of the job is to make the appraisals on ranches necessary to establish carrying capacity and the kind of improvements needed. This information is turned over to the County Committee for their use in determining the amount of benefit payment and in checking compliance.

In North Dakota, at least, where applications are already being received, the volume of work will apparently run far beyond that which was originally anticipated. Several of the Regions have detailed men to us for this work.

Forest Supervisor F. Lee Kirby of Region 3 has been detailed to us to head up the work, and is now in North Dakota getting it under way. We are fortunate in having been able to get Kirby; his many years of experience on the heavy grazing Forests of Region 3 ideally adapt him to handle this job, where both knowledge of range management and organizing ability are essential.

- P.H.R.

#### TREASURY ACCOUNTS OFFICE LIKES OUR WORK

The following letter has been received by the Fiscal Agent from the Treasury Accounts Office:

"During the period of September 24 to 30 inclusive the Payroll Section of this office kept a record of the errors made on pay rolls, by agency and type of error. You will be interested, and I believe gratified to know that there were only two minor mistakes noted from all of the pay rolls submitted by the Plains Shelterbelt Project during that period. These errors were in connection with adjustment figures as shown on the Payroll Routing Slip, (Form D-53).

"May I express my sincere appreciation of the fine cooperation we are receiving from your agency, particularly your Payroll Unit."

- R.W.

#### WHO KNOWS---

A rapid and reasonably accurate method of determining whether a seedling in a strip is dead and needs to be replaced?



Whether a seedling with dead top but live roots should be considered dead and be replanted?

How much exposure the roots of various species of seedlings will actually stand without injury?

The reason for the practice of not top-pruning American elm seedlings?

The best way to use peat moss in the stratification of seed?

(Here is something to whet your teeth on. They are all questions which Timber Management feels have never been adequately answered. What do you think?)

#### SO A PLEASANT TIME WAS HAD BY ALL

Prayer meetings, professional rain makers and witch doctors having failed to break the drouth in Nebraska, the Regional and Nebraska State offices shook the moth balls out of its collective raincoats and threw a picnic Sunday a week ago. Truth compels the admission that something less than a cloudburst was evoked, but if a good steady drizzle was of any benefit to the country, the affair was worth while.

State Director Emerson, with a low cunning of which we had not considered him capable, ran in a "show me" trip to two of his nearby nurseries, and was successful except for the matter of timing. At 1:30 p.m. the appreciation of yellow pine seedlings as such is lost in a contemplation of their possible value in a pot with ham hocks.

Your reporter, ably assisted by Sid Burton and a charming young lady whose identity he has ever since been trying to establish (there seems to be a conspiracy about this somewhere), fried steaks and his shins most of the rest of the afternoon, and established an important physiological fact, to-wit; the capacity of the human stomach is greater than any three quarts, or whatever it is the anatomists say.

And so home to bed, fagged but full.

#### NURSERY STOCK DISPLAY

A display of nursery-stock samples has been requested by the Division of Silvics of the Washington office for use in committee hearings to illustrate the size and form of desirable nursery stock; that is, the kind which has proved successful in field planting, contrasted with unsatisfactory nursery stock. The purpose of the display is to emphasize the need for adequate research in nursery and planting practice which will lead to improved results from private effort in tree planting in the region.

A set of 18 major species is being prepared by South Dakota, Nebraska, and Oklahoma, illustrating for each species the following classes of stock: (1) Ideal size and quality seedling for Plains planting, approximately 1/4" caliper with good balance between root and top, (2) Top-heavy seedling, (3) Spindly seedling, (4) Undersize seedling.

Seedlings for this display are being dug while in full leaf, including as much of the root as possible up to 12" natural length. They are then pressed into a layer of cotton with cardboard back. The entire mount is then covered with cellophane with the edges taped to the back of the cardboard.

A set of samples for five species has been received to date from the Brookings, South Dakota nursery. These samples are beautifully mounted and make a very attractive display.

- H.E.E.

#### LABOR QUOTA STATUS - September 30

STATES	QUOTA		FULFILLED				TOTALS	
	Man Months		Man Months		Percent		Percent of Total	
							R.R. and 10%	
	R.R.	10%	R.R.	10%	R.R.	10%	Combined	
N.Dakota	771	87	582.9	55.8	75.6	64.1	74.4	
S.Dakota	798	90	803.6	48.7	100.7	54.1	96.0	
Nebraska	771	87	649.0	70.5	84.2	81.0	83.9	
Kansas	621	69	630.3	55.2	101.5	80.0	99.3	
Oklahoma	465	51	397.0	32.9	85.4	64.5	83.3	
Texas	216	24	287.3	28.0	133.0	118.3	131.4	
TOTALS	3642	408	3350.1	291.1	92.0	71.3	90.0	

Indications at this time point to the complete fulfillment of our man month quotas on this Project. A summary will be prepared after the next semimonthly reports are received showing final status for the quarter.

#### WE ALSO BOWL (OR AT LEAST THINK WE DO)

The Regional Office has again entered a team in the Commercial Bowling League in Lincoln, rated the second toughest league in town. The personnel of our team is Paul Roberts, Captain, Ray Ward, Bill Ihlanfeldt, Otto Bartos, Mark Thomas, and Bill Maynard.

After getting off to an unusually good start, we ran into a bad slump and are only now getting back into our stride again. This week we took our match handily, and the score now stands 7 won and 11 lost.

Some time later in the season, when football and other extraneous and trifling diversions are out of the way, I should like to suggest an inter-Regional and Shelterbelt three-game tournament for the Forest Service championship. All teams would begin rolling at an identical time - probably some Saturday afternoon since we, at least, would have difficulty getting alleys for any evening other than our regular night - the championship being awarded to the team turning in the best score for the ensuing three games.

Do I hear any takers?

- B.M.

### CLEAN CULTIVATION ESSENTIAL

It is unfortunate that cultivation and hoeing of strips was abandoned during the first half of July as it was later found that the weeds in the uncultivated strips not only sapped the moisture from the soil but, in addition, furnished shelter for the barrage of grasshoppers which arrived with the heat and drought of summer. It was so hot in the clean cultivated strips that the grasshoppers were not able to venture out from their shaded refuges among the weeds outside. Even though the soil was so hot that it was uncomfortable to walk through it, and corn, grass, and even cockleburs shriveled up, no bad effects were noted on the trees where clean cultivation was maintained. ...Coming through a summer that has broken most heat and drought records, which killed large numbers of mature trees and prevented the development even of cockleburs, it seems almost like a miracle that a high percentage of our planted trees have survived.

### SPLENDID IDEA!

Assistant Forester Baxter recently aided the Kansas Extension Service in a Conservation Camp conducted for the benefit of 4-H Club leaders and members. About 175 persons were in attendance. Mr. Baxter awarded almost 100 merits in forestry, and a letter from the Assistant State Club Leader indicates that the interest in forestry was good.

### HEAD GATES FOR NURSERY IRRIGATION

The problem of controlling a uniform flow of water down several rows of nursery stock at the same time led John Rogers, Nurseryman of the McPherson, Kansas lease, to construct a small gate for each row. A ten-inch board, twenty-four inches in length, was taken and a gate hole of approximately 4 x 6 inches sawed in the middle. This gate hole, or opening, was covered with a small block hinged on a single pole, allowing it to be opened or closed at will. A set of these gates consisting of 15 or 20 or more was installed at the opening from the head ditch and a perfect control of water down all the rows was secured by opening or closing these small gates. Earthen dams used to accomplish the same degree of control require constant care, and it is next to impossible to keep the low or fast row from getting an excess of water by water breaking over. With the gate method, the supply of water for each row is controlled. This simple device brought a great deal of improvement in ditch irrigation.

### SUBSOILING IN NURSERIES

Discovering that certain deep-rooted species in one of the nurseries were not responding properly to irrigation, we decided to try subsoiling as a means of getting the water down to the roots. A small Clotrac pulling two subsoilers opened up trenches three inches in width and a foot deep, which were then flooded. Tests, using strips not so treated, as a check, showed a decided advantage in favor of the subsoiling.

In using this method, care must be exercised not to run the implement so deep as to possibly leave air pockets after irrigation, and in hard ground to avoid lifting trees in solid blocks of earth.

- T.R.R.



USES DISC ATTACHMENT FOR CULTIVATING

E. Garth Champagne, Field Supervisor in Nebraska, reports that the use of a disc attachment on the drawbar of a Minneapolis-Moline tractor has proved more satisfactory in the cultivation of strips than the spring tooth and two-row cultivators. He cites as advantages that the disc attachment does not clog up, that in even a heavy weed cover it does a clean job, and that it will cover a greater acreage per day. Also, it was found possible to do a good job in hard dry soil where the standard cultivators failed to perform satisfactorily.

SHADES OF EDISON!

Carl Taylor, in charge of the seed collection program in Nebraska, tells of a seed-cleaning machine which has been developed there which will apparently do everything but pick the operator's teeth. Remarking that "obviously the first requisite in the production of planting stock is seed--GOOD seed and plenty of it," he goes on to say:

"The most useful mechanical help we have developed so far, is the "macerator." This is a small machine built on the principle of a threshing machine, but with solid concaves mounted watertight so that pulpy fruits such as plums, mulberries, chokecherries, buffaloberries and cedar berries can be run with additional water and retained in the machine until macerated to a thin paste, - the macerated pulp and seed emerging continuously from an adjustable opening.

"The same machine operated at higher speed with the discharge open is entirely satisfactory for threshing out such seeds as honey locust, caragana, and black locust; also for knocking off Russian olives, buffaloberries and cedar berries from the twigs prior to depulping. Complete construction drawings of the macerator are available to anyone wishing to have one made, and a number of the larger nurseries have adopted it as standard nursery equipment. The Mount Arbor Nursery of Shenandoah, Iowa is having three made, - one for use in California cleaning Mahaleb cherry, widely used as an understock plant for fruit budding."

The macerator will handle a ton of chokecherries in an eight-hour day which, we submit, is a lot of chokecherries.

MULBERRY SEED

Nebraska discovers that fifty pounds of mulberries yield one pound of clean seed, and the seeds average 250,000 per pound.

Moderate fermentation of the fruits makes cleaning much easier and more thorough, so experiments were run to determine if it was detrimental to the seed. It was found that the lots fermented one day and two days, respectively, showed more than twice as high a germination percentage as that of the fresh-cleaned berries, when planted shortly after cleaning. However, a test run several weeks later showed that the short period of after-ripening in dry storage increased the germination of fresh-cleaned seed from 27% to 76%, - the lot fermented one day increased from 60 $\frac{1}{2}$ % to 90 $\frac{1}{2}$ %, while the lot fermented two days depreciated from 63% to 29%. The lots fermented for four, six, eight, and ten days, respectively, were killed completely by the fermentation and showed zero germination.



: NORTH DAKOTA :

NURSERY PRACTICE CONFERENCE

The first conference of State Officers in charge of nurseries was held September 29 and 30 at the Enderlin Nursery at Enderlin, North Dakota. State Officers present were W. Gosnell, Oklahoma and Texas; H. Rigdon, Kansas; L. Matthew, Nebraska, M. Pfaender, South Dakota, and A. Williams, North Dakota. Others present included Burton and Engstrom from the Regional Office and three North Dakota nurserymen, Hutchinson, Belknap, and Patten.

The conference was called principally for the purpose of developing a satisfactory and practical method of grading, counting, and tying deciduous seedlings in the field as they are pulled. Previous procedure for these operations has been to haul all seedlings into a warehouse or packing shed and grade, count, and tie inside. This practice has in most cases resulted in considerable confusion and wasted effort.

After trying out numerous methods a procedure was developed which was agreed upon as being satisfactory, and under proper crew organization, exposure of the seedlings during the three operations is less than 15 minutes.

Other items involving the handling of nursery stock during the digging and storing operations were brought up for discussion and trial at the conference. Agreement as to the most acceptable procedure was reached in every instance.

The results of this meeting are already apparent. North Dakota nurserymen report that they are completing their fall nursery operations considerably faster than originally planned due to the practices developed.

- H.E.E.

WISE BANKER

State Director Cobb is authority for the following interesting incident:

A farmer owing the bank in Bottineau, North Dakota \$9,000.00, was observed by the banker buying a large quantity of trees for his farm. The banker mentioned that it would seem he, the farmer, would want to pay off his note before spending money to improve the place with trees. The farmer replied that he expected to own the farm and that when that time came he wanted the trees established. This farmer paid out his note as predicted. This banker became interested in the relation between a farmer's desire for trees and his good faith and ability to pay off indebtedness. He indexed his cases and found that apparently the farmer who had sufficient pride in his place to maintain a good shelterbelt or woodlot was a good customer for the bank. Today when a farmer comes to his bank for a loan, the first thing that is checked up is whether or not he has a good belt of trees on his farm. If he has, he gets the loan.

- D.S.O.

GOOD SURVIVAL

October 1 survival counts in the Mangum District have been completed and show the following results;

1935 plantings, 75.46% (Comprises about 5 miles of strip)

1936 plantings, 68.63% (Comprises about one-half of the 1936 plantings)

The trees have made fair to good growth, the ones planted in the Spring of 1936 averaging from three to nine feet in height, and those planted in 1935 averaging from five to eighteen feet.

All 1936 plantings have been cultivated at least once since July 1, and those 1935 strips needing cultivation since then have also been cared for.

The crowns have closed over in the 1935 strips so that no weeds have grown in the strips, with the exception of the sides unplanted, since June 30. This growth has been in sandy loam soils. The very fine sandy soils will have to be cultivated in 1937 because the crowns have not closed in those strips.

SEED COLLECTION

Seed collection has been very difficult this summer and fall due to late frost last spring killing much of the seed crop while yet in the bloom, and the hot dry weather causing a great deal of seed not to mature. Despite these unfavorable conditions we are going to collect our quota of seed in most species. The quality of the seed, however, is below average. Because of birds eating the partially ripe fruit, some of the seed has been collected before being fully mature. Bird food has been extremely scarce this summer, and birds have fed on seeds which they ordinarily would not eat.

MESQUITE LIKES DROUTH?

Howard Carleton, Jr., Senior Shelterbelt Assistant at Mangum, Oklahoma, reports an unusual circumstance regarding which he would appreciate comments as to the cause. Despite the fact that this summer has been probably the hottest and driest ever experienced in Oklahoma, mesquite trees near Mangum made abnormal growth. Many of the trees which have been standing for as long as 15 years without making any appreciable growth have grown 12 to 18 inches during July and August and have a dense foliage this year as compared with a normally sparse foliage. It looks as though they thrive on desert conditions.

WHAT DO YOU SAY, T. M.?

Mr. Carleton states that, in his opinion, cedar trees should not be planted until deciduous trees have made growth for at least two years, when they will serve as sort of nurstrees for the cedars and, also, that some cover crop should be planted near the cedars so that they will be partially shaded from the sun during the early-growing period of the stock.

--J.R.N.

### NURSERY STOCK GRADER

Nurseryman I. W. Kreiger working under the immediate direction of Associate Forester, Max Pfaender, has been spending his spare time during the summer on a mechanical nursery stock grader. The need for such a contrivance is recognized by all connected with this project. Where relief labor and CCC labor is used, nursery stock grading and counting is anything but accurate.

We believe that Kreiger, who has a rather keen mechanical mind, has developed a machine that has real possibilities in the grading and counting of a large amount of nursery stock accurately and rapidly.

This machine accurately grades stock as to caliper, counts the seedlings and mechanically ties each bundle. Preliminary tests with this machine are very promising. There are a few minor changes necessary, which Kreiger thinks he can easily make.

### HELPING THE A.C.P.

The South Dakota Unit has furnished measurements and acreages of all strip and farmstead plantings by counties to State Soil Conservation Board. These acreages and measurements will be of great assistance to them in checking compliance with farmers in connection with the Soil Conservation program in this State. We believe such cooperation brings our program real returns.

### ECONOMIC TREE SURVEY NEARS COMPLETION

The field work for the economic survey in South Dakota has been completed. Three hundred two farms are involved in this tree survey. Surprising facts and figures have been obtained. When the tabulation and deductions from this survey are completed, we believe some very startling facts will be uncovered.

Mr. W. E. Webb has been in charge of this survey. The field work has been done by Walter Potas of South Dakota, J. L. Duncan and Ned Samuels of Kansas, and Jr. Forester Arthur Lehmann of the Lake States Station.

### TRAINING CONFERENCE

The South Dakota training conference for nurserymen was held at the Baltic Nursery on Friday, October 9. The purpose of this conference was to develop safe and efficient practices for digging, grading, and winter storage of nursery stock. This was the State follow-up conference resulting from the project conference recently held at Enderlin, North Dakota.

Those in attendance at this meeting were Harold Engstrom of the Regional Office, all South Dakota nurserymen, Max Pfaender, and the State Director.



AVAST THERE, VOGEL!

(Editor's Note: The following contributions were submitted by Jules Vogel who, in addition to being head potentate of the books in Texas, has also for the past couple of months been riding herd on the other activities of the Unit a good part of the time. Only the mental strain and worry caused by this overload could account for the dastardly attack upon our golfing reputation contained in his first item. If Bill Strachan even insinuates that we ever failed to replace any tree torn up by us in our golfing activities on his course, we shall have the matter up with the A. G. A. There are some things in life which are sacred as between a man and his Maker. As the old Roman poet so aptly had it:

"Shoot if ye must this auld gr-r-rey head,  
But slander my golf at your per-r-ril, he said!").

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Bill Strachan, in charge of the golf course at Wichita Falls, has just completed a survival count of the trees covering the entire 18 holes. He reports a wonderful survival, due to timely rains, the departure of John R. Nelson to Oklahoma, and the transfer of E. L. Perry to Lincoln. The tules are of course getting much thicker since these two golfers (?) have departed.

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Nurseryman Carl O. Davis of Texas is spending the month of October on detail to South Dakota. Carl is hoping for a detail to Florida during December and January; he came from a cold country (Wyoming) but the Texas sunshine has so altered his system that he can no longer "take it."

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Jr. Foreman Kershner of Texas is on detail to Oklahoma. There is not enough of the Texas personnel left for a bridge game.

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Samuel A. Byars, formerly of Texas but now with Nebraska, visited the Texas office recently on his way to the Gulf for a little piscatory playing. Sammy really loves his fish - they can't talk back.

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Seed crop in Texas, reports Jr. Foreman Schattenberg, is very short this fall.

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Texas has finally been visited by bountiful rains. Nature, as always in trying to strike a balance, sent floods to offset the extreme drought. We had either 10" of rain in 12 days, or 12" in 10 days - we are all wet on the subject, but anyway it did rain.

: JUST GOSSIP :

Jack Nelson, for the past couple of months Acting Director of both the Oklahoma and Texas Units, has relinquished that Mexican jumping bean role and will henceforth devote his talents exclusively to Oklahoma. He says he has worn out two automobiles and a bus line dashing to and fro, and could easily drive the highway between Oklahoma City and Wichita Falls backwards with his eyes shut.

Walter E. Webb, of South Dakota, is taking the Texas Unit in hand effective October 16, and will have occasion to discover that the town Dalhart is closer to the capitols of six other states than it is to Austin.

---oooOooo---

To date, Messrs. Cramer, Whitlock, Weaver, Gallup, Miller, and Meyers of Region 1; Zeger, Nordwall, and Cayton of Region 2, and Kluender of Region 9 have been detailed to us and assigned to North Dakota to work on the Range Conservation Program, while Newcomer, Powell, and Shoemaker from Region 2, and James from Region 3, have been assigned to Kansas.

All indications point to the probability that they will do their eating and sleeping mostly on the run between now and January 1.

---oooOooo---

Miss Bowen, Assistant to the Chief Clerk in Timber Management, has been selected for the Chief Clerk position in the newly-organized Division of Range Management. Chief of the G-men, as it were!

---oooOooo---

Mr. Hart, accountant in F.C., Mr. Siren, Nebraska; Mr. McFarling, South Dakota, and Miss Smith, Kansas, have recently accepted positions in the Rapid City office of the Soil Conservation Service. The well wishes of this organization go with them to their new jobs.

---oooOooo---

Frank Hausherr, of F. C., is taking six months leave without pay in addition to his accrued annual leave for the purpose, first, of catching up on his visiting, and later of taking a course in statistical methods at LaSalle University, Chicago. And just when we were beginning to be able to understand the statistical methods he already knows, too!

---oooOooo---

Junior Forester Lehman, who has been working on the economic tree survey in South Dakota, is being transferred to Texas. It is to be hoped that Lehman and Webb will have perfected a convincing Southern drawl by the time they arrive in that ex-Republic; the bulk of the populace there have never learned that "danyankee" is two words.

- E.L.N.

